Welcome to the Documentation Page

Introductions

Repository:

https://gitlab.nps.edu/arsenl/acs_docs

Quick Start Guide

1. Prepare yourself
2. Install development environment
3. Run software-in-the-loop (SITL)

Listing of ACS Docs

Markdown source available at https://gitlab.nps.edu/arsenl/acs_docs

- arbiter
- autopilot
- controller
- deploy
- ground
- future
- install
- launch
- logs
- mission
- payload
- preflight
- sitl
- telemetry
- utilities
- wireless

- arbiter
  The Arbiter: the ACS game engine and scoring referee; usage and design notes
- autopilot
  Overview and design notes on the modifications to Ardupilot firmware
- controller
  The swarm controller architecture and how to implement a new swarm behavior
- deploy
  Software deployment onto an aircraft
- ground
  Overview of the ground software: Swarm Commander (classic and 3D) and Health Monitor; discussion of in-flight operations
- future
  Sketches of planned future developments and improvements
- install
  Software installation for a ground station / development / SITL machine
- launch
  Launch checklists and use of the Flight Tech Interface
- logs
  Accessing and downloading log files
- mission
  Description of how the autopilot is configured for swarming missions and setting up a mission configuration server
- payload
  Overview and design notes on the onboard autonomy payload
- preflight
  Pre-flight procedures and preparation of flight and ground systems
- sitl
  Running a Simulation-In-The-Loop of one or multiple swarms
- telemetry
  Configuration of 3DR 900 MHz telemetry radios
- utilities
  Overview of utility programs run on the ground
- wireless
  Overview of the 802.11n wireless radio configuration and ACS networking